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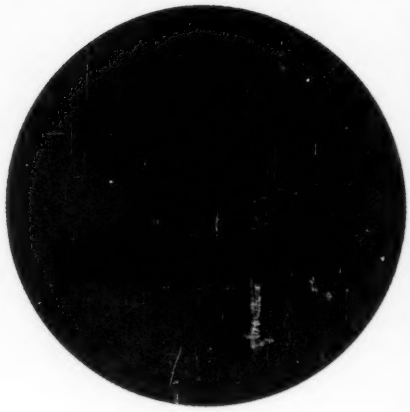
JANUARY 1972



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Indexes to ASME Papers and Publications

Volume 93, 1971

This and the following pages will serve as a guide to the current publications of the ASME.

Regular Society Publications, 1971

MECHANICAL ENGINEERING, monthly (see index on page SR-21)
ASME Transactions, quarterlies (see combined index on page SR-109)
- Series A, *Journal of Engineering for Power*
- Series B, *Journal of Engineering for Industry*
- Series C, *Journal of Heat Transfer*
- Series D, *Journal of Basic Engineering*
- Series E, *Journal of Applied Mechanics*
- Series F, *Journal of Lubrication Technology*
- Series G, *Journal of Dynamic Systems, Measurements, and Control*

Applied Mechanics Reviews, monthly
Applied Mechanics Reviews, Annual Index, 1971

Publications Issued In 1971

BOOKS AND REPORTS

Advanced Centrifugal Compressors
Annals of Reliability and Maintainability
Applications of Holography in Mechanics
Applied Mechanics Aspects of Nuclear Effects in Materials
Cavitation Forum—1971
2¼ Chrome 1 Molybdenum Steel in Pressure Vessels and Piping
Code on Definitions and Values
Computer Software in Structural Analysis
Design for Elevated Temperature Environment
Diesel and Gas Engine Power Proceedings—1970
Engineering Computer Software: Verification, Qualifaction, Certification
Environmental and Geophysical Heat Transfer—Volume 4
Fabricated Nuclear Piping
Freight Car Impact—Volume 1
Fluid Dynamic Measurements
Fluid Meters, Their Theory and Application
Guide to Code Requirements for a Controlled Manufacturing System and the ASME Survey for Compliance
Heat Transfer in Low Reynolds Number Flow—Volume 5
Life Adjustment Factors for Ball and Roller Bearings—An Engineering Design Guide
Limited Field Installation of Nuclear Power Plant Components and Appurtenances
List of Companies Holding Certificates of Authorization for Use of Code Symbol Stamps
Loss Prevention of Rotating Machinery
Manufacturers' Data Report for Nuclear Part and Appurtenances
Manufacturers' Data Report for Nuclear Vessels
Manufacturers' Data Report for Nuclear Vessels (Alternate Form for Single Chamber Completely Shop-Fabricated Vessels Only)
1970 National Incinerator Conference—Discussions Only
North American Fuel Technology
Nuclear Pumps or Valves
Owner's Data Report for Nuclear Power Plant Components
Rail Transportation Proceedings—1971
Recent Developments in Thermophysical Properties Research—Volume 3
Report on Diesel and Gas Engine Power Costs—1971
Role of Nucleation in Boiling and Cavitation—Discussions Only
Safety and Safety Relief Valves
Seismic Analysis of Pressure Vessel and Piping Components
Spent Nuclear Fuel Heat Transfer—Volume 2
Survey of Nucleonic Heat Transfer—Volume 1
Synthesis of Vibrating Systems

ASME STANDARDS

ASTM-ASME Recommended Practices for the Flushing and Cleaning of Lubricating Systems of Various Turbine Driven Pumps for Marine Service
ASTM-ASME Recommended Practices for Flushing and Cleaning of Gas Turbine Generator Lubricating Oil Systems
ASTM-ASME Recommended Practices for the Flushing and Cleaning of Oil Systems for Lubrication and Control of Hydroelectric Equipment
ASTM-ASME Recommended Practices for the Purification of Oil Systems for Lubrication and Control of Hydroelectric Equipment

AMERICAN NATIONAL STANDARDS

Base Mounted Drum Hoists
Cast Bronze Threaded Fittings
Cast Iron Threaded Fittings, 125 and 250 Lb
Cast Iron Threaded Drainage Fittings
Die Buttons—Basic Taper Relief, Press Fit
Die Buttons—Basic Straight Relief, Press Fit
Die Buttons—Basic Ball Lock
Die Buttons—Variable, Press Fit
Electrical and Electronics Diagrams (With 1970 Supplement)
Elevators, Dumbwaiters, Escalators, and Moving Walks
Factory-Made Wrought Steel Buttwelding Fittings
Ferrous Pipe Plugs, Bushings and Locknuts with Pipe Threads
Finished and Rough Brass Plumbing Fixture Fittings
Floating Cranes and Floating Derricks
Graphic Symbols for Electrical and Electronics Diagrams
Inservice Inspection of Nuclear Reactor Coolant Systems, Section XI of the 1971 ASME Boiler and Pressure Vessel Code
Inverted Tooth (Silent) Chains and Sprocket Teeth
Leaf Chain
Liquid Petroleum Transportation Piping Systems
Malleable-Iron Threaded Fittings, 150 and 300 Lb
Mounting Dimensions of Lubricating and Coolant Pumps for Machine Tools
Nonferrous Pipe Flanges, 150, 300, 400, 600, 900, 1500 and 2500 Lb
Nuclear Power Piping—Addenda Only
Power Piping—Addendum Only
Roof Drains
Round Head Bolts
Steel Bushed Rollerless Chains, Attachments and Sprocket Teeth
Steel Pipe Flanges and Flanged Fittings (150, 300, 400, 600, 900, 1500 and 2500 Lb) Including Reference to Valves—Addenda Only
Taps—Cut and Ground Threads

PERFORMANCE TEST CODES

Code on Definitions and Values

How to Find Papers Presented at 1971 ASME Meeting

The technical programs of the meetings of the Society and of its Professional Divisions have been published in MECHANICAL ENGINEERING and may be located by consulting the index on page SR-21. Many of these papers will be published in MECHANICAL ENGINEERING or the *Transactions* and may be located by reference to the indexes of these publications.

Currently Available ASME Publications

ASME members may purchase most of the publications listed below at a 20 percent discount. Handling and mailing charges are added to price when payment does not accompany order.

American National Standards

ELEVATOR CODES & GENERAL STANDARDS

A13.1—1956 Scheme for the Identification of Piping Systems. $2.00
A17.1—1971 Elevators, Dumbwaiters, Escalators and Moving Walks. $11.75
A17.2—1960 Practice for the Inspection of Elevators—Inspectors' Manual (With 1965 and 1967 Addenda). $5.25. (1965 Addenda only. $1.00; 1967 Addenda only. $1.50)
A40.4—1942 and .6—1943 Air Gaps and Backflow Preventers in Plumbing Systems. $2.50
A40.5—1943 Threaded Cast Iron Pipe for Drainage, Vent and Waste Services. $2.00
A40.8—1955 National Plumbing Code. $6.00
A90.1—1969 Manlifts. $3.00
A112.11.1—1968 Self-Contained, Mechanically Refrigerated Drinking-Water Coolers. $2.00
A112.18.1—1971 Finished and Rough Brass Plumbing Fixture Fittings. $2.50
A112.21.1—1968 Floor Drains. $2.00
A112.21.2—1971 Roof Drains. $2.50
A112.26.1—1969 Water Hammer Arresters. $2.50
A113.1—1964(R1971) Mechanized Parking Garage Equipment. $4.50

SCREW THREADS, PIPE THREADS & CYLINDRICAL PARTS

B1.1—1960 Unified Screw Threads. $6.00
B.1.1a—1968 Unified Screw Threads—Metric Translation. $3.50
B1.2—1966 Gages and Gaging for Unified Screw Threads. $6.00
B1.7—1965 Nomenclature, Definitions and Letter Symbols for Screw Threads. $2.75

B1.10—1958 Unified Miniature Screw Threads. $2.00
B1.11—1958 Microscope Objective Thread. $2.00
B1.12—1963 Class 5 Interference—Fit Thread. $2.00
Metric Screws Threads. (Not ANSI Standard). $3.50
B2.1—1968 Pipe Threads (Except Dryseal). $4.25
B2.4—1966 Hose Coupling Screw Threads. $2.75
B4.1—1967 Preferred Limits and Fits for Cylindrical Parts. $3.00

MACHINE TOOLS, COMPONENTS, ELEMENTS, PERFORMANCE & EQUIPMENT

B5.1—1949 T-Slots—Their Bolts, Nuts, Tongues and Cutters. $2.00
B5.5—1959 Rotating Air Cylinders and Adapters. $2.00
B5.8—1954 (R1959) Chucks and Chuck Jaws. $2.50
B5.9—1967 Spindle Noses for Tool Room Lathes, Engine Lathes, Turret Lathes and Automatic Lathes. $3.50
B5.10—1963 Machine Tapers. $3.50
B5.11—1964 Spindle Noses and Adjustable Adapters for Multiple Spindle Drilling Heads. $2.00
B5.16—1952 Accuracy of Engine and Tool Room Lathes. $2.00
B5.18—1960 Spindle Noses and Arbors for Milling Machines. $2.00
B5.20—1958 Machine Pins. $2.00
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B5.32—1953 Designation and Working Ranges of Grinding Machines. $2.00
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B5.37—1970 External Cylindrical Grinding Machines—Centerless. $2.00
B5.38—1958 Driving and Spindle Ends for Portable Air and Electric Tools. $2.00
B5.40—1968 Spindle Noses and Tool Shanks for Horizontal Boring Machines. $3.00
B5.41—1968 Quill Flanges and Spindle Ends for Upright and Horizontal Drill Spindles for Production Type Drilling Machines. $2.00
B5.42—1970 External Cylindrical Grinding Machines—Universal. $2.25

GEARS & POWER-TRANSMISSION APPARATUS

B6.1—1968 Tooth Proportions for Coarse-Pitch Involute Spur Gears. $2.00
B6.5—1954 Letter Symbols for Gear Engineering. $2.00
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Design for Elevated Temperature Environment. 1971. $7.50
Guide to Code Requirements for a Controlled Manufacturing System and the ASME Survey for Compliance. 1970. $1.50
History of the ASME Boiler Code. 1955. $5.00
List of Companies Holding Certificates of Authorization for Use of Code Symbol Stamps. 1971. $15.00
Pressure Vessel and Piping Design. 1960. $18.00
Pressure Vessel Technology
Design and Analysis—Part I
1969. Hardbound. $37.50
Materials and Fabrication—Part II
1969. Hardbound. $37.50
Discussions—Part III
1970. Hardbound. $20.00
Seismic Analysis of Pressure Vessel and Piping Components. 1971. $15.00
Use of the Computer in Pressure Vessel Analysis. 1969. $8.50

PERFORMANCE TEST CODES

PTC 1—1970 General Instructions (With 1971 Addendum). $4.00
PTC 2—1971 Code on Definitions and Values. $4.50
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INSTRUMENTS AND APPARATUS

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APS—2 Recommended Guide for the Control of Oxides of Sulfur (With Supplement). 1970. $3.00. (Supplement only. $1.00)
No. 101 Operation and Flow Process Charts. 1949. $2.50
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Draft ASME Code for Pumps and Valves for Nuclear Power (With 1970 Addenda). 1968. $5.00. (Addenda only. $2.00)
Guide for Gas Transmission and Distribution Piping Systems (December 1970). $17.50
LOS—2C1 ASTM-ASME Recommended Practices for the Flushing and Cleaning of Lubricating Systems of Various Turbine Driven Pumps for Marine Service. 1971. $3.00
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1971 Rail Transportation Proceedings. 1971. $20.00
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Reliability and Maintainability (Reprinted from MECHANICAL ENGINEERING). 1966. $2.00
1968 Reliability and Maintainability Conference Proceedings—"Annals of Assurance Sciences." 1968. $27.00
Space Systems and Thermal Technology for the 70's. (Aviation & Space Papers—Part 1. 1970. $45.00; Heat Transfer Papers—Part II. 1970. $45.00)
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Baker, Merl chairman of projects board on American Society for Engineering Education 1971–1972 board of directors ..... **N 89**
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Barnes, Dana H., Jr. elected Fellow ASME **My 89**
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Ham, I.
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Hamann, F. H.
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Hamann, John R. elected vice-president by Detroit Edison Co. board of directors ... **Je 77**
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Hamilton, J. F.
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Hammer, A. N.
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Hampton, Robert K. elected Fellow ASME **Jl 76**
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Harper, E. Y.
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Harper, John D. elected Fellow ASME **F 102**; receives Fellow ASME certificate **Je 79**; elected member of National Academy of Engineering ... **Je 77**
Harper, William Z. named assistant manager of field and shop divisions and Ridge Construction Co. by Kodak Park Division, Eastman Kodak Co. ... **Ja 105**
Harris, A. B.
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Harris, S. C.
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Hedrick, Charles L. appointed manager of operations for the Erie City Energy Div. of Zurn Industries, Inc. ..... My 88
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Hench, J. E.
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Hering, R. G.
Transient Combined Conductive and Radiative Heat Transfer [71-HT-22] (*A*) **O 62**

Hering, Richard F. named chief mechanical engineer of the American Electric Power Service Corp., N. Y. **O 90**

Herrala, Thomas W.
Space Shuttle Environment Control and Life Support System [71-Av-16] (*A*) **O 56**

Hersh, Alan S.
Noise Abatement in Industry
Noise Abatement and Its Control in the Petroleum Industries
Refinery Flair System Injectors Redesigned for Noise Control [70-WA/Pet-4] (*A*) **Ap 55**

Hertz, P. B.
Unconfined Elastomer Die Blanking [based on 71-Prod-6] **D 12**
Unconfined Elastomer Die Blanking [71-Prod-6] (*A*) **Jl 49**

Hertzberg, R. W.
Anisotropy of Fatigue Crack Propagation [71-Met-G] (*A*) **Ag 48**

Herzog, W. G.
Tracer Tests for Nuclear Power Plant Steam Turbines [based on 69-WA/PTC-3] **Ja 15**

Heskestad, G.
Two-Dimensional Miter-Bend Flow [70-WA/FE-1] (*A*) **F 71**

Hess (Henry) Award
See Honors

Hester, J. Charles named head of Clemson University's Mechanical Engineering Department **Ap 85**

Heter, E. D.
Factors Affecting Design and Reliability of High Performance Gears in Process Compressor Trains [71-Pet-30] (*A*) **D 50**

Hetsroni, G.
Distribution of Mass, Velocity, and Intensity of Turbulence in a Two-Phase Turbulent Jet [70-WA/APM-45] (*A*) **Je 48**

Heuschkel, J.
Analysis of Cracks in Welded Elbows [71-PVP-32] (*A*) **Ag 53**

Heydt, G. T.
A Directed Random Search [70-WA/Aut-7] (*A*) **F 69**

Heyward, Theodore C. deceased **Ja 107**

Hickman, K. E.
High Entrainment Ejector Design [71-FE-34] (*A*) **S 52**

Hierath, Leonard L. opens own office in Arvada, Colo., under the name Leonard L. Hierath/Engineering Consultants **Ag 85**

Hietbrink, E. H.
Electric Storage Batteries for Vehicle Propulsion [70-WA/Ener-7] (*A*) **Ap 62**

Higgins, E. M. deceased **N 93**

High Speed Technology
See also Speed Technology; Velocity
Advanced Design Concepts for High Speed Bearings [71-DE-50] (*A*) **Ag 47**

Highways
See Surfaces, Roads

Hikido, K.
The Adaptability of LWR Quality Assurance Standards to the LMFBR [71-NE-9] (*A*) **Jl 43**

Hilgartner, G. H. deceased **S 99**

Hill, John R. appointed manager of tubing operations, Babcock & Wilcox Tubular Products Division, Beaver Falls, Pa. **Ja 105**

Hill, M. J.
Analytical and Experimental Studies of Two-Dimensional Flows in a Radial Bladed Impeller [71-GT-20] (*A*) **Jl 36**

Hill, R. F.
Evaluation of Machinability and Machining Parameters of Cold Formed Steel Parts [71-DE-42] (*A*) **Ag 46**

Hillier, M. J.
Dynamic Expansion of an Open-Ended Tube [71-Met-K] (*A*) **S 54**
Yield Criteria and the Bauschinger Effect for a Plastic Solid [71-Met-P] (*A*) **S 55**

Hilt, M. B.
Noise Abatement in Industry
Gas Turbine Noise Abatement
Formation and Measurements of Nitrogen Oxides in Gas Turbines [70-WA/GT-3] (*A*) **Ap 56**
Reduction of Nitrogen Oxides from Gas Turbines by Steam Injection [71-GT-58] (*A*) **Ag 46**

Hindhede, U.
Cold-Machining—An Investigation of the Mechanics of Metal Cutting as Affected by the Workpiece Temperature in the Sub-Zero Range [70-WA/Prod-24] (*A*) **Mr 62**

Hinges
Large Sideward Deflections of Two-Hinged Circular Arches [71-DE-E] (*A*) **Jl 48**

Hironaka, M. C.
Site Surveying for Ocean Floor Structures [71-UnT-8] (*A*) **D 47**

Hirotsu, T.
Statistical Analysis of Adhesion Performance of Locomotives [70-WA/RR-8] (*A*) **Je 42**

History
National History and Heritage Committee established by ASME late in 1970 to identify mechanical engineering attainments of the past by designating landmarks, sites, machinery and other materials of historic interest, as well as such other tangibles suitable for the U. S. National Archives as drawings, old photographs, company records, and the recollections and reminiscences of engineers **Ap 85**

Hitomi, K.
Optimization of Multistage Machining System: Analysis of Optimal Machining Conditions for the Flow-Type Machining System [70-WA/Prod-15] (*A*) **Mr 61**

Ho, H. T.
Hydrodynamic Characteristics of a Cambered Hydrofoil with a Jet Flap [71-APMW-17] (*A*) **N 56**

Ho, Hwa-Shan
Limit Analysis for Combined Edge and Pressure Loading on a Cylindrical Shell [71-PVP-22] (*A*) **Ag 52**
Shakedown in Elastic-Plastic Systems Under Dynamic Loadings [71-APMW-27] (*A*) **N 56**

Hobbs, G. K.
Methods of Modeling and Analyzing Viscoelastically Damped Structures [71-Vibr-36] (*A*) **N 51**

Hochheiser, R. M.
Noise Abatement in Industry
Gas Turbine Noise Abatement
Some Results of Fan/Compressor Noise Research [70-WA/GT-12] (*A*) **Ap 56**

Hochmuth, R. M.
Uniaxial Stretching of the Red-Cell Membrane [70-WA/BHF-12] (*A*) **Ap 64**

Hodge, Philip G., Jr. becomes technical editor of Journal of Applied Mechanics **Jl 72**

Hodges, J. L.
Nitric-Oxide Generation in a Simulated Spark-Ignition Engine [70-WA/PID-3] (*A*) **Mr 63**

Hodographs
A Family of Hodograph Models for the Crossflow Velocity Component of Three-Dimensional Turbulent Boundary Layers [71-FE-1] (*A*) **Ag 54**
The Hodograph Transformation in Plastic Waves with Discontinuous Loading Conditions [71-APMW-12] (*A*) **N 55**

Hoekzema, R. J.
Synthesis of a Four-Bar Linkage Adjustable for Variable Radius of Curvature of a Coupler Curve [70-Mech-80] (*A*) **Je 54**

Hoffer, Arnold H. appointed president of Dyna-Truck Div., Dynamics Corp. of America **Jl 74**

Hoffman, H. W.
Performance Characteristics of Corrugated Tubes for Vertical Tube Evaporators [71-HT-30] (*A*) **O 63**

Hoffman, J. S.
Liquid Distributions of a Low Pressure Drop Injection System-Gas Turbine "Vaporizer" Design [71-GT-38] (*A*) **Ag 45**

Hofmann, R.
The Dynamic Response of Blast Shields and Barricades to Impulsive Loadings [71-PVP-48] (*A*) **S 48**

Hoge, K. G.
An Experimental and Numerical Study of Elastic Strain Waves on the Center Line of a 6061-T6 Aluminum Bar [71-APMW-22] (*A*) **N 57**

Hoglund, Nils O. receives Cooper Union School of Engineering and Science Alumni Association's Gano Dunn Medal **My 88**

Holberson, Henry A. named president of the Youngstown Metal Products Co. division of Youngstown Sheet and Tube Co. **My 88**

Holcomb, W. N.
Design and Development of a Boron-Glass-Epoxy Lightweight Composite Gear Case [71-GT-85] (*A*) **Jl 41**

Holding
Creep/Fatigue Interaction Correlation for 304 Stainless Steel Subjected to Strain-Controlled Cycling with Hold Times at Peak Strain [71-PVP-6] (*A*) **Ag 50**

Holes
Stress Concentration in a Cylindrical Shell Containing a Circular Hole [71-PVP-9] (*A*) **Ag 50**
Stresses in a Pressurized Ribbed Cylindrical Shell with a Reinforced Circular Hole Interrupting a Rib [71-PVP-8] (*A*) **Ag 51**
Visual Detection of Holes in Thin Polymeric Films (*NTB*)

Holl, J. William corecipient of George Wallace Melville Medal at 1970 WAM **Ja 69, 70**

Holland, J. W.
Thermionic Reactor Development [70-WA/Ener-13] (*A*) **Ap 62**

Hollasch, K.
Calibration of Constant-Temperature Hot-Wire Anemometers at Low Velocities in Water with Variable Fluid Temperature [71-HT-9] (*A*) **O 61**

Holliday, G. H.
Photoelasticity Applied to Analysis of Tubular Connections for Offshore Structures [71-Pet-27] (*A*) **D 50**

Hollis, R. Frank elected Fellow ASME **F 104**

Holloway, J. H.
Tracer Tests for Nuclear Power Plant Steam Turbines [based on 69-WA/PTC-3] **Ja 15**

Holm, C. H. deceased **Ag 87**

Holman, J. L. Monte receives Purdue University's Schools of Engineering "Distinguished Engineering Alumnus" award **Je 77; Jl 74**

Holmes, J. T. deceased **Ag 87**

Holography
Acoustical Holography (*BTR*) **F 47**
Application of Holographic Techniques to Turbine Disk Vibration [71-Vibr-105] (*A*) **D 54**
Applications of Holography to Dynamics: High-Frequency Vibrations of Beams [70-WA/APM-5] (*A*) **My 57**
Concealed Weapon Detector (*BTR*) **S 36**
Holographic Analysis of Turbine Blades [71-GT-84] (*A*) **Jl 41**
Holographic Characterization of Aerospace Components [71-GT-74] (*A*) **Jl 40**
Holographic Detection of Microcracks [71-Met-C] (*A*) **Ag 48**
The Laser in Aerospace (*BTR*) **My 43**
Using Laser Holography for Nondestructive Testing **Mr 27**

Holster, J. L.
Bellows Vibration with Internal Cryogenic Fluid Flows [71-Vibr-14] (*A*) **N 49**

Holt, R. C.
Design for In-Service Inspection of Boiling Water Reactor Pressure Vessels [71-PVP-59] (*A*) **S 50**

Holzer, S. N.
Response Bounds for Columns with Transient Loads [70-WA/APM-32] (*A*) **Je 47**

Home Electric Pak
See Power Plants

Homer, C. E. deceased **Je 80**

Honami, S.
Investigation Concerning the Fluid Flow in the Mixed-Flow Diffuser [71-GT-40] (*A*) **Jl 38**

Honeycombs
Forming Fiberglass Honeycomb Elements (*NTB*) **S 41**

Honorof, E. P.
Analysis of Trace Contaminants [71-Av-17] (*A*) **O 56**

Honors
AIEE
Names Gordon B. Carson a Fellow **Jl 74**
Presents award for Outstanding Achievement in Management to Willard F. Rockwell, Jr. **Jl 74**
AMIME
Confers honorary membership on James M. Guy **Ja 104**
ASEE
44th Lamme Gold Medal Award presented to Richard G. Folsom **O 89**
G. Edwin Burks Award of $1000 presented to Edward F. Obert **D 80**
ASME
ASME Medal
Awarded *in absentia* at 1970 WAM to Robert Rowe Gilruth **Ja 75**
Presented to Gilruth **My 87**
To be presented at 1971 Winter Annual Meeting to Horace Smart Beattie, Jr. **S 89**
Aviation and Space Division's Design Award of 1971 presented to Gerard W. Elverum **S 92**
Certificate for initiative and leadership in development of new engineering merit badge for the Boy Scouts of America presented at 1970 WAM to Joseph P. Vidosic **Ja 75**
Design Engineering Division's Machine Design Award presented at 1970 WAM to Reynold Benjamin Johnson **Ja 69, 70**
Machine Design Award Nominations Sought **D 75**
DGP Meritorious Service Award presented (at 1971 DGP Conference) to John E. Onnen **Jl 67**
DGP Speaker Award presented (at 1971 DGP Conference) to Ralph S. Warner **Jl 67**
Diesel and Gas Engine Power Award presented (at 1971 DGP Conference) to Melvin I. Helmich **Jl 67**

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50 years of service recognition and ovation at 1970 WAM for Clarence E. Davies, Secretary Emeritus of ASME....Ja 72
Fluids Engineering Division's Lewis F. Moody Award of 1971 presented to Graham Wallis S 89
Gas Turbine Power Award presented, 1971, to Caryle Reid....Je 64, 65
Heat Transfer Division Memorial Award presented at 1970 WAM to Donald Q. Kern and Robert Siegel....Ja 71
Heat Transfer National Conference of 1969 Best Paper Award presented at 1970 WAM to G. C. Vliet and C. K. Liu....Ja 71
Honorary Membership
Conferred at 1970 WAM on Richard G. Folsom, Martin Goland, William Prager Ja 75
Folsom receives award....S 91
Goland receives award....My 88
Prager receives award....Ja 75
To be awarded at 1971 Winter Annual Meeting to Robert A. Bowman, Mylon E. Merchant, Nathan M. Newmark....S 89
Life Quality Engineering Citation for meritorious technological leadership and achievement presented to Luis A. Ferre....Je 77
Metropolitan Section of ASME presents leadership awards and fetes Bill Byrne....Jl 75
Plant Engineering and Maintenance Division presents Guerard Mackey Best Paper Award in 1971 [for paper presented at 1970 PEM Conference] to William S. Gatley....D 79
Prime Movers Committee Award (1971) presented to Paul Leung and Raymond E. Moore D 74, 75, 80
Regional Faculty Advisor of Year award presented to Charles J. Merz, Jr. ....Ja 105
ASTM
1971 Max Hecht award bestowed on J. Fred Wilkes....Ja 104
1971 Walter C. Voss Award presented to Everett C. Shuman....Ag 85
Best Papers Awards
Heat Transfer National Conference of 1969 Best Paper Award presented at 1970 WAM to G. C. Vliet and C. K. Liu....Ja 71
Plant Engineering and Maintenance Division presents Guerard Mackey Best Paper Award in 1971 [for paper presented at 1970 PEM Conference] to William S. Gately....D 79
Reliability and Maintainability 9th Conference (1970) Best Paper Award goes to K. W. Bills, Jr., and H. J. Wiegand....S 93
Cooper Union School of Engineering and Science Alumni Association awards Gano Dunn Medal to Nils O. Hoglund....My 88
Drexel University Evening College Alumni Association's 20-Year Award goes to (1971) Jesse LeCoff....Jl 74
East (Leo H.) Memorial Award presented by Rochester (N. Y.) Engineering Society to "Rochester Engineer of the Year" designee Phil T. Elliott....Ap 85
Eckman (Donald P.) Award Nominees Sought by American Automatic Control Council....My 74
Edison Medal, 1971, awarded by IEEE to John W. Simpson....Ap 85
Egleston (Thomas) Medal awarded by School of Engineering and Applied Science at Columbia University to Raymond D. Mindlin....S 97
Engineering Society of Detroit's highest membership honor "The Distinguished Member Service Award," of 1971 goes to Clement Freund..S 98
Gantt (Henry) Memorial Gold Medal Awarded to Frederick R. Kappel....Ap 80
Guggenheim (Daniel) Award of ASME, SAE, AIAA
Presented at 1970 WAM to Jakob Ackeret..Ja 75
1971 recipient to be Archibald Edward Russell S 94
Hess (Henry) Award presented at 1970 WAM to Thomas I. Geers....Ja 74, 75
Hoover Medal from ASCE, AIME, ASME, IEEE presented at 1970 WAM to John Erik Jonsson Ja 76
Kansas State University presents special recognition certificate to M. A. Durland, emeritus dean, College of Engineering....Jl 74
Lehigh University presents, to Ferdinand P. Beer, the R. R. and E. C. Hillman Award, which goes to the Lehigh faculty member who has done the most toward advancing the interests of the university....S 98
Main (Charles T.) Award
Presented at 1970 WAM to Steve H. Woodard Ja 74, 75
1971 recipient to be James M. Singleton S 34; (*ECA*)....N 83
Melville (George Wallace) Medal presented at 1970 WAM to J. William Holl and Alain L. Kornhauser....Ja 69, 70
Navy's Meritorious Civilian Service Award
Presented to Harold V. Nutt for distinguished service as special assistant for scientific affairs to Commander, U. S. Naval Forces, Vietnam F 101
Presented to Danos H. Kallas....Ag 85
Nichols (Percy) Award from AIME Coals Division and ASME Fuels Division presented at 1970 WAM to R. C. Corey....Ja 72
Offshore Technology Conference Distinguished Achievement Award for Individuals Presented (1971) to Julius A. Stratton....Je 55
Ohio State University's Centennial Achievement award recipients include Carl W. Hall....Ja 104
Oldenburger (Rufus) Medal presented at 1970 WAM to John R. Ragazzini....Ja 70
Outstanding Paper Awards:
Pressure Vessel Technology 1st International Conference (1969) to Thomas Slot....Jl 64
Pennsylvania State University Honors James L. Everett, III, as Distinguished Alumnus...Jl 74
Pi Tau Sigma
Pi Tau Sigma Gold Medal presented at 1970 WAM to Richard E. Barrett....Ja 74, 75
Call for Pi Tau Sigma Nominations....Mr 78
Plastics Science and Engineering annual International Award from Society of Plastics Engineers goes to Albert G. H. Dietz....Je 77
Purdue University
Harry Solberg Award for outstanding undergraduate teaching to Frederick B. Morse Jl 74
Schools of Engineering "Distinguished Engineering Alumnus" awards go to Thomas W. Head and J. L. Monte Holman....Je 77; Jl 74
Richards (Charles Russ) Memorial Award presented at 1970 WAM to Ralph G. Nevins Ja 74, 75
Society of Naval Architects and Marine Engineers
Graduate Paper Award to Leonardo Peres y Perez....Ja 105
Graduate Paper Honor Prize to Joel D. Snyder, III....Ja 105
Linnard (Capt. Joseph H.) Prize to Frank M. Lewis....Ja 105
Sperry (Elmer A.) Medal from ASME, IEEE, SAE, SNAME, AIAA presented at 1970 WAM to Charles Stark Draper....Ja 76
Certificates of citation also presented at 1970 WAM to Delco Electronics Division of General Motors and Aero Products Division of Litton Systems....Ja 76
Taylor (J. Hall) Medal presented at 1970 WAM to Bernard F. Langer....Ja 69, 70
Timoshenko (Stephen P.) Medal presented at 1970 WAM to James Johnston Stoker....Ja 73
Trent-Crede Award presented by Acoustical Society of America to Raymond D. Mindlin D 80
University of Cincinnati Distinguished Engineering Alumnus Awards go to Robert M. Goldhoff and Warner L. Stewart....Je 78
University of Colorado
Distinguished Alumnus Achievement Award goes to Glenn Murphy....Jl 74
Engineering Development Council's Distinguished Engineering Alumnus Achievement Awards go to Glenn Murphy and Marcellus S. Merrill....Je 78
Warner (Worcester Reed) Medal presented at 1970 WAM to Wilhelm Flugge....Ja 69, 70
Watt (James) International Gold Medal awarded to Dr. Robert R. Gilruth by Institution of Mechanical Engineers of Great Britain (*NR*)..D 64
Westinghouse (George) Award
1970 recipient is Robert C. Spencer, Jr.....S 91
1971 recipient to be Wilfred McGregor Hall D 74, 75
Williston (Arthur L.) Medal and Award
Presented at 1970 WAM to Steven H. Carlson Ja 74
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Hooper, A. T.
The Stress Analysis of Plates with Single and Clustered Nozzles by the Boundary Point Least Squares Method [71-PVP-20] (*A*)....Ag 52
Hoover, R. M.
Noise Abatement in Industry
Gas Turbine Noise Abatement
The Sound of Gas-Turbine Installations [70-WA/GT-6] (*A*)....Ap 56
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Hopkins, Bryant L., Jr.
The Job Problem (*C*)....Ja 55
Hopson, George D.
Skylab Environmental Control and Life Support Systems [71-Av-14] (*A*)....O 56
Horger, O. J.
Factors Affecting Axle Stresses [70-WA/RR-1] (*A*)....Je 42
Horlock, J. H.
On Entropy Production in Adiabatic Flow in Turbomachines [71-FE-3] (*A*)....Ag 54
Hormell, Duane C. deceased....Ja 107
Hornbuckle, J. D.
In-Service Inspection of San Onofre Nuclear Generating Station—Unit 1 [71-PVP-51] (*A*) S 48
Hornschuch, Hanns receives Outstanding Leadership Award from Metropolitan Section of ASME....Jl 75
Hornung, K. G.
Rolamite—A Tool in Hysteresis Measurement [71-Vibr-27] (*A*)....N 50
Horovitz, M. S.
Automatic Checkout of Complex Modules [71-Vibr-115] (*A*)....D 55
Hottel, H. C.
Mathematical and Experimental Modeling of the Circulation Patterns in Glass Melts [70-WA/HT-11] (*A*)....Ap 59
Houghton, Arthur V. named director, Bureau of Engineering Research, University of New Mexico, College of Engineering My 88; named director of university's Eric H. Wang Civil Engineering Research Facility....Ag 85
Howard, J. H. G.
Measured and Predicted Flow Near the Exit of a Radial-Flow Impeller [71-GT-15] (*A*)....Ag 44
Howard, T. W. deceased....N 93
Howell, R. H.
Drag Force Measurements of a Compressible Turbulent Boundary Layer on an Adiabatic Smooth Flat Plate [70-WA/FE-26] (*A*)....F 74
Howes, P. S.
The Static and Dynamic Behavior of Warren Type Machine Tool Structural Elements [70-WA/Prod-7] (*A*)....Mr 60
Hoyt, Harlan K. elected Fellow ASME...D 81
Hoyt, J. W.
New ASME Freeman Scholars Selected; Reviews to Be Presented at WAM....Je 56
Hrubecky, H. F.
Dynamic Behavior of a Switching Jet in a Model Bistable Fluidic Device [70-WA/Flcs-20] (*A*) Je 44
Hryniewicz, H. W. deceased....N 93
Hsia, E. S.
Entrance Development of the Weakly Interacted MHD Plane Channel Flow as Affected by Wall Conductances [71-APM-A] (*A*)....O 59
Hsia, H. Tao-Sze
A Criterion for the Combustion Modes in Constant Area Combustors [70-WA/Av-4] (*A*)....F 68
Hsieh, D. Y.
Effects of Heat and Mass Transfer on Rayleigh-Taylor Instability [71-FE-7] (*A*)....Ag 54
Hsing, F. C.
The Effect of Fluid Inertia on a Porous Thrust Plate—An Analytical Solution [70-Lub-18] (*A*) Ja 44
A Qualitative Study of Gas Bearings Operating at High Subsonic and Supersonic Tangential Speeds [71-APM-U] (*A*)....O 59
Hsu, C. C.
On Flow Past a Supercavitating Cascade of Cambered Blades [71-FE-6] (*A*)....Ag 54
Hsu, Chen-Chi
Falkner-Skan Flows of Power-Law Fluids [71-FE-35] (*A*)....S 52
Hsu, H.-L. deceased....O 91
Hsu, K. H.
Indentation of a Circular Membrane [70-WA/APM-33] (*A*)....Je 47
Hsu, T. C.
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Hu, Kuo-Kuang
On the Nonlinear Vibrations of Free-Free Beams [70-WA/APM-55] (*A*)....Je 49
Huang, C. C.
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Huang, H.
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Huang, Matthew
Synthesis of Four-Link Space Mechanisms via Extension of Point-Position-Reduction Technique [70-Mech-17] (*A*)....Ja 47
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Hubbard, A. M.
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Huber, E. J.
Safety Considerations in the Selections of Switches and Relays [71-DE-33] (*A*) . . . . . Jl 47
Hudachek, R. J.
The Story of a Synthesis Gas Compressor Failure [71-Pet-31] (*A*) . . . . . D 50
Huddleston, J. V.
Behavior of a Steep Prestressed Arch Made from a Buckled Strut [70-WA/APM-15] (*A*) . . . . My 58
Hudson, Donald E. elected Fellow ASME Jl 76
Hudson, Kenneth (*author*)
"A Guide to the Industrial Archaeology of Europe" (*BR*) . . . . . N 62
Hudson, T. W.
A Seal User Looks at Improving Dynamic Seal Applications [71-DE-9] (*A*) . . . . . Jl 45
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Hulbert, L. E.
The Stress Analysis of Plates with Single and Clustered Nozzles by the Boundary Point Least Squares Method [71-PVP-20] (*A*) . . . . . Ag 52
Hull, F. C.
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Biomedical Materials Compatibility and the Design Challenge [71-DE-8] (*A*) . . . . . Jl 45
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Evaluation of Cardiac Work by Means of the Thermodilution Technique Employing the Thermocatheter [70-WA/Temp-2] (*A*) . . . My 54
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Large Deformation Analysis of the Arterial Cross Section [70-WA/BHF-15] (*A*) . . . . . Ap 63
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Propagation of Longitudinal Waves in Circularly Cylindrical Bone Elements [71-APM-5] (*A*) S 55
Relationship Among Frequency, Amplitude, Damping and Human Awareness for Floor Vibration Due to Impact [71-Vibr-44] (*A*) . . N 51
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A Single Joystick Hydraulic Control System with Six Independent Simultaneous Velocity Proportional Degrees of Freedom [70-Mech-54] (*A*) Ja 51
The Sky Above the Noise Below (*EN*) . . . . . Je 60
Students' Machine Aids Cerebral Palsy Victims (*EN*) . . . . . O 74
A Synopsis of the Use of Fluerics in Medicine [70-WA/Flcs-16] (*A*) . . . . . Je 44
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Johanson, Norman R. elected ASME Region V Vice-President 1972–1974 ..... N 85

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Jones, O. E.
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Jones, R. W.
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Jones, W. T.
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Jones, Wilfred appointed vice-president, Corporate Projects Div., Daniel Construction Co., Greenville, S. C. ..... Jl 74

Jonsson, John Erik elected member of National Academy of Engineering Je 77; receives Hoover Medal from ASCE, AIME, ASME, IEEE at 1970 WAM ..... Ja 76

Joplin, J. L.
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Jost, H. Peter elected Fellow ASME ..... F 104

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Kallas, Danos H. granted Navy Meritorious Civilian Service Award for third time in his career as federal employee ..... Ag 85
Kalnins, A.
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Kao, Hsiao C.
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Kappel, Frederick R. awarded Henry Gantt Memorial Gold Medal ..... Ap 80
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Kassir, M. K.
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Kasuba, R.
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Kasza, K. E.
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Katz, S.
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Katz, Sherwin appointed chief application engineer for Waterman Hydraulics, Div. of Componetrol, Inc. ..... N 89
Katz, W. J.
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Kauffeld, Theodore J. deceased ..... Ja 107
Kaufman, A.
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Kaufman, K. A.
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Kaufman, R. E.
Operators for the Kinematic Synthesis of Mechanisms by Stretch-Rotation Techniques [70-Mech-79] (*A*) ..... Ja 54
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Ke, J. S.
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Keaten, R. W.
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Keck, J. Wylly receives Fellow ASME certificate ..... Mr 85
Keer, L. M.
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Kegg, R. L.
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Kehrberg, R. Frank
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Kellenberger, W.
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Kelley, C. W.
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SNG Agreement (*OS*) ..... D 44
Kellum, G. B.
Signature Analysis of Plant Equipment [71-Pet-14] (*A*) ..... D 48
Kelly, Louis J. (Jack) receives Fellow ASME certificate **Mr 86**; a vice-president of Bechtel Corp., retires after 40-year career in refinery, chemical, fertilizer, and metallurgical fields—will continue to serve Bechtel as a consultant D 80
Kelly, R. C. deceased ..... D 83
Kelly, W. H.
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Kelsey, R. A.
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Kelsey, W. H. deceased ..... My 91
Kemper, J. D.
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Kempner, J.
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Kendall, D. P.
The Effect of Strain Rate and Temperature on Yielding in Steels [71-Met-R] (*A*) ..... S 55
Kennedy, Verne C., Jr. accepts position with Hayek Engineering Corp., Zurich, Switzerland, as president of Hayek's American affiliate in Chicago ..... Ap 85
Kent, Lawrason R. deceased ..... Mr 88
Kenyon, N.
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Kern, Donald Q. corecipient at 1970 WAM of Heat Transfer Division Memorial Award **Ja 71**; deceased ..... Je 80
Kerska, Donald H. receives Detroit Section Past-Chairman's Award ..... Ja 104
Kersten, L.
Computer-Aided Methods to Relate Analytical and Graphical Design of Mechanisms [70-Mech-77] (*A*) ..... Ja 53
Kessel, P. G.
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Kester, J. D.
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Kestin, Joseph elected Fellow ASME ..... D 81
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Ketchie, Edgar M. elected National Director for Region V of Society of Manufacturing Engineers ..... F 101
Kettering (Eugene W.) Engineering and Science Center
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Khan, A. R.
Heat Transfer from Large Double-Fluted Vertical Tube Evaporators [71-HT-34] (*A*) ..... N 57
Kibler, J. J.
Model II Fatigue Crack Propagation [71-Met-J] (*A*) ..... S 54
Kiburz, Jack Y. named a job development executive with National Alliance of Businessmen **Mr 84**; named St. Louis, Mo., metropolitan area director for the National Alliance of Businessmen ..... Je 77
Kidd, Alexander deceased ..... F 106
Kidd, W. E.
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Kilaparti, S. R.
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Kindl, Fred H. elected Fellow ASME ..... Jl 77
Kindley, L. M.
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Kingston, William J. appointed assistant superintendent of utilities division by Kodak Park Division, Eastman Kodak Co. ... Ja 105
Kinsman, George receives Professional Achievement Award of Illinois Institute of Technology Alumni Association **Ag 85**; elected to board of directors of American Nuclear Society .. S 97
Kirk, R. G.
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Kirkby, H. W.
12 percent Chromium Steel Disks for Industrial Gas Turbines [71-GT-39] (*A*) ..... Jl 38
Kirkpatrick, Edward T. named president of Wentworth Institute, Boston, Mass. ... Ap 86
Kirkwood, Arthur C. deceased ..... Ja 107
Kirmser, Philip G.
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Kirszenblat, A.
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Kiser, K. M.
Measurement of Sequential Velocity Development in the Aorta [70-WA/BHF-13] (*A*) ..... Ap 63
Kispert, Edwin G. retires as general manager, Industrial and Marine, Babcock & Wilcox Co. to work toward PhD in engineering at the University of New Hampshire ..... S 97
Kitchen, J. W., Jr.
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Klein, E. W.
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Klein, R. E.
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Klein, R. W.
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Kleiner, Gilbert N.
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Klein, S. J.
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Kline, K. A.
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Kloner, J. M.
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Knapp, J. G.
Industrial Design: Its Role in Cost Reduction [based on 71-DE-25] ..... D 23
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